

Elect. Machine PK To G. 10/11/51
Electrograph type 43-1

The Electrograph type 43-1 is an equipment that enables carrying out electrographic photographs of the different parts of the bodies of human beings, animals, parts of plants and so on. The shots can be carried into operation both at the high tension single discharges as well as using whole series of such discharges, whilst the discharge frequency can be adjusted in a continuous way on the panel of the respective apparatus.

Technical particulars:

Amplitude of the tension generated abt 40 kV
Discharges frequency: single discharges, or adjustable
in the margin, from 1 up to 50 cps,
more or less.
Feeding: from supply mains of 110, 125, 150, 220 and 240 V,
as well as 60 as well as 50 cps

Apparatus manipulation:

Putting into operation of the apparatus:

Before connecting the apparatus to the power mains we have to verify if the power main selector, mounted at the back of the apparatus has been adjusted on the correct power main tension. We have to convince ourselves as well, that the fuse contained in the fuse box, placed next to the power main selector is of the capacity prescribed.

Once the checks are carried out, we ground the apparatus with the help of the banana jack mounted on the apparatus panel and marked..... The grounding is carried out by the introduction of the wire terminated with a banana, whose other end has been earthed. Once the grounding is ready, the interconnection with the power main can be effectuated. The power main intake is to be introduced to the power main tank located at the rear of the apparatus next to the circuit tension selector.

Whilst carrying out the above preparation, observe the circuit breaker situated in the right hand upper corner of the apparatus panel has to be in the position V - switched off, signaled by a pilot lamp.

Before connecting the apparatus already on the high tension lead out a tattle serving for carrying out the electrographic photos, eventually some electrode to be used, have to be connected. It is undesirable to let the apparatus connected whenever the lead-out has not been charged by a suitable electrode.

Once connected the electrode we want to use for photographing purposes, we connect the power main switch located in the right hand upper corner of the apparatus panel. At the same time the pilot lamp mounted above the said switch has to lighten up. Since that moment the apparatus is completely ready for operation and electrographic photos can be carried out.

Electrographic photography practice

Once connected, f. inst., the tattle on which the photos are to be carried out, the entire equipment has to be located in darkness, the sensitive photographic material /paper, film or photographic plate/ is to be located, and on the above material we place the object, whose photo we wish to obtain. If, f. inst., we want to make a shot of the hands fingers, it suffices to put the hand on the above mentioned material, connect the apparatus and make the exposure, either by the individual discharge, or by a whole series of the same.

When wishing to expose by one high tension discharge only, we press the button for the discharge frequency inserted and we press the push button mounted next to the circuit switch.

In that case each pressing of the push button produces a unique discharge that will be used for the exposure purposes. If, however, we wish to make exposures by discharges lasting some time and following each other in a rapid way, we extract the button with the help of which the discharge frequency is adjusted. Thus the generator is set working, one which automatically sets working the high tension charges, as well as the frequencies, which can be regulated within the limits of some 1-50 cps by the button designated FREQUENCY /Frequency/.

As mentioned previously, if we want to photograph, for inst., the ^{figure} of a hand it is sufficient to lay the hand in question on the top of the sensitive material, on account of the fact, that any man standing on the floor is grounded-even if such earthing is of a small capacity one, and thus connected with one high tension pole. If, however, we want to shot some parts of plants, it does not suffice to lay them on the photographic material. In such a case it is better to disconnect the feed supply to the table's electrode and touch with the said power supply directly the material we wish to shot. The high tension power main is closed against the earth across the proper tables capacity, the photography being made possible this way.